

### Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims:

- 1-2. (cancelled)
3. (currently amended) Method to counteract the loss of cellular differentiation and to treat cell proliferation in tumor pathologies comprising the step of administering to a subject in need an effective amount of at least a compound selected from the group consisting of 5, 11-dihydro-6H-dipyrido (3, 2-b:2', 3'-e) (1, 4) diazepine class of compounds, nevirapine, efavirenz, delavirdine, and corresponding salts of nevirapine, efavirenz, and delavirdine, wherein said tumor pathologies are selected from the group consisting of leukemia, carcinomas ~~epithelial tumors~~, tumors of the nervous system, fibro- and osteo-sarcomas.
4. (previously presented) The method according to claim 3 wherein the compound reconverts the differentiated cells into phenotypically normal cells.
5. (currently amended) The method according to claim 3 wherein said carcinomas ~~epithelial tumors~~ are selected from the group of teratocarcinoma, colon carcinoma, breast carcinoma, adenocarcinoma, and hepatoma.
6. (withdrawn) The method according to claim 3 wherein the compound is selected from the 5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepine class of compounds.
7. (previously presented) The method according to claim 3 wherein the compound is selected from the group consisting of: nevirapine, efavirenz, delavirdine, and corresponding salts thereof.
8. (previously presented) The method according to claim 3 wherein the compound is present in a pharmaceutical composition that further comprises one or more carriers and/or diluents and/or solvents and/or excipients suitable for oral, intravenous, intramuscular or hypodermic injection administration.
9. (currently amended) The method according to claim 3, ~~any one of claims 3-8~~ wherein the compound is present in a pharmaceutical composition ~~the pharmaceutical compositions are in the form of a pill, suspension, or solution~~ pills, suspensions or solutions.
- 10-11. (cancelled)

12. (previously presented) The method according to claim 3 wherein the tumor of the nervous system is glioma.

13. (previously presented) The method according to claim 3, wherein the leukemia is acute myeloid leukemia.

14. (new) The method according to claim 3, wherein said tumor pathologies are selected from the group consisting of carcinomas, tumors of the nervous system, and fibro- and osteo-sarcomas.

15. (new) The method according to claim 5, wherein the compound is selected from the 5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepine class of compounds.

16. (new) The method according to claim 5, wherein the compound is selected from the group consisting of: nevirapine, efavirenz, delavirdine, and corresponding salts thereof.

17. (new) The method according to claim 5, wherein the compound is present in a pharmaceutical composition that further comprises one or more carriers and/or diluents and/or solvents and/or excipients suitable for oral, intravenous, intramuscular or hypodermic injection administration.

18. (new) The method according to claim 5, wherein the compound is present in a pharmaceutical composition in the form of a pill, suspension, or solution.